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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,991	07/13/2001	Peter Galicki	TI-29499	3449
23494	7590	01/11/2005	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			LEE, ANDREW CHUNG CHEUNG	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/904,991

Applicant(s)

GALICKI ET AL.

Examiner

Andrew C Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Fig. 1, page 5, line 16, the referenced elements "bridge 102 and receiver 103".

Fig. 3, page 7, line 24, the referenced element "the pins 303".

Fig. 4, page 8, line 26, the referenced element "internal I/O RAM 406".

Fig. 8, the referenced element "808".

Fig. 10, page 15, line 27, the referenced elements "INT_UNEXP and INT_TOUT". Page 15, line 2, the referenced element "INT_TOUT interrupt"

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Fig. 4, the referenced elements "PAR RAM, EMIF32, McBSP1, McBSP0, HPI, TIMER1, TIMER0, PLL, PWR DWN, L2 INSTR-RAM 402, L2 DATA-RAM 403". Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:
- Page 15, line 4, the referenced element "left bit" is a typo. It should be corrected as "right bit" since the previous sentence disclosed the function of "left bit".

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- Fig. 15, line 18, the referenced element “ a 27-bit CFG_BUS”, the Office would request the Applicant to clarify this discrepancy. The Specification discloses “27-bit CFG_BUS”, while 26 CFG BUS is indicated in the Fig. 10.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 4, 5, 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Liang et al. (U.S. patent No. 5732086).

Regarding claim 1, Liang et al. discloses the limitation of a method of data processing (column 1, 7 – 10) comprising: connecting a plurality of data processing nodes in a peer-to-peer relationship, thereby enabling each data processing node to receive data packets from adjacent input connected nodes and to transmit data packets to adjacent output connected nodes (Fig. 1, column 4, 42 – 47); at each data processing node examining data packets received for

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adjacent input connected nodes and selectively routing the data packet to the current data processing node (column 4, lines 47 – 50), routing to an adjacent output connected node or both, whereby any data processing node can transmit a data packet to any destination data processing node for forwarding by other data processing nodes to the destination data processing node (column 4, lines 55 – 59); at each data processing node responding to a receipt confirmation data packet received from a source data processing node by transmitting an acknowledge data packet to the source data processing node (column 6, lines 55 – 57); and at least one supervisory data processing node periodically transmitting a receipt acknowledge data packet to each other data processing node (Abstract, lines 2 – 8; column 2, lines 56 – 60; lines 62 – 66) and determining a data processing node has failed upon failure to receive an acknowledge data packet from the data processing node in response to a receipt confirmation data packet (column 7, lines 1 – 7).

Regarding claim 2, Liang et al. discloses the limitation of a method of data processing of claim 1, further comprising the steps of: storing health data at each data processing node concerning the current health operating status of the data processing node (column 14, lines 21 – 31); and wherein said step of responding to a receipt confirmation data packet includes transmitting an acknowledge data packet including the health data (column 14, lines 16 – 20).

Regarding claim 4, Liang et al. discloses the limitation of a method of data

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processing of claim 1, further comprising: at each data processing node storing a unique node ID (column 3, lines 36 – 40); at each data processing node storing an indication of node IDs corresponding to each adjacent output connected node (column 3, lines 48 – 54); said step of selectively routing the data packet includes routing the data packet to the current data processing node if a header of the data packet includes the node ID of the data processing node (column 4, lines 66 – 67; column 5, lines 1 – 6), routing the data packet to an adjacent output connected node if the header of the data packet includes a node ID matching the corresponding stored indication of node IDs for the adjacent output connected node (column 6, lines 63 – 67), and not routing the data packet to the current data processing node or to any adjacent output connected node if the header of the data packet includes a node ID not matching the node ID of the data processing node or the stored indication of node IDs for any adjacent output connected node (column 6, lines 31 – 32; lines 22 – 26).

Regarding claim 5, Liang et al. discloses the limitation of a method of data processing of claim 1, further comprising: altering the stored indication of node IDs corresponding to each adjacent output connected node in data processing nodes adjacent to a failed node to route data packets around the failed node (column 7, lines 1 – 7).

Regarding claim 6, Liang et al. discloses the limitation of a method of data processing of claim 1, wherein each data processing node includes a CPU core

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and a bridge circuit connected to the CPU core (Fig. 2, element 20, 40; column 4, lines 28 – 29, lines 42 – 47), the adjacent input connected nodes and the adjacent output connected nodes (column 4, lines 44 – 47), said method further comprising the steps of: at each data processing node employing a program running on the CPU core to periodically reset a timer in the bridge circuit (column 2, lines 54 – 56; column 13, lines 13 – 16; column 13, lines 36 – 46); and at each data processing node using the bridge circuit to not route any data packet to the current data processing node or to any adjacent output connected node upon expiration of a time of the timer (column 13, claim 2, lines 47 – 52; claim 3, lines 53 – 56), whereby a data processing node having a failed CPU core absorbs all received data packets (column 13, lines 27 – 35).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liang et al. (U.S. patent No. 5732086) in view of Sabzevari (U.S. Patent No. 6058120).

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Regarding claim 3, Liang et al. discloses the limitation of a method of data processing (column 1, 7 – 10), Liang et al. does not disclose expressly a method of data processing of claim 1, further comprising the steps of: at each data processing node resetting an internal data processor in response to receipt of a reset data packet; and sending a reset data packet from a supervisory data processing node to a data processing node determined to have failed. Sabzevari discloses the limitation of a method of data processing of claim 1, further comprising the steps of: at each data processing node resetting an internal data processor in response to receipt of a reset data packet (column 15, lines 48 – 51); and sending a reset data packet from a supervisory data processing node to a data processing node determined to have failed (column 15, lines 41 – 48). It would have been obvious to modify Liang et al. to include a method of data processing of claim 1, further comprising the steps of: at each data processing node resetting an internal data processor in response to receipt of a reset data packet; and sending a reset data packet from a supervisory data processing node to a data processing node determined to have failed such as that taught by Sabzevari in order to provide a method for controlling a telecommunications system component that increases the speed and reliability of control for the component.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is

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(571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ajit Patel
Primary Examiner

ACL / AU:2664

28 December 2004